



Connecting T3/E3 Network Modules

This chapter describes how to connect T3/E3 network modules for modular access routers and contains the following sections:

- [1-Port T3/E3 Network Modules, page 20-1](#)
- [Connecting T3/E3 Network Modules to the Network, page 20-2](#)
- [T3/E3 Network Module LEDs, page 20-3](#)
- [Related Documents, page 20-3](#)



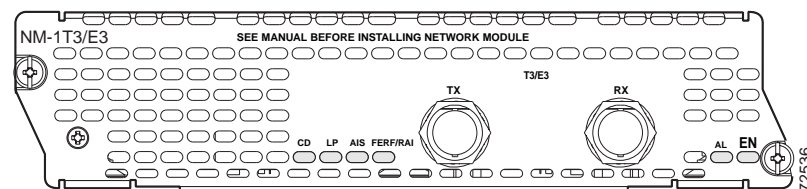
Tip

To determine whether your router supports a specific network module, see [Table 1-6 on page 1-16](#).

1-Port T3/E3 Network Modules

The NM-1T3/E3 network module is a single-port universal T3/E3 network module with integrated CSU/DSU, clear channel, and subrate support. (See [Figure 20-1](#).) Channels on the network module can be configured as either T3 or E3 through Cisco IOS software.

Figure 20-1 1-Port T3/E3 Network Module Faceplate



Note

The NM-1T3/E3 network module provides subrate T3 support for Digital Link, Kentrox, Larscom, Verilink, and Adtran. The NM-1T3/E3 network module also provides subrate E3 support for Digital Link and Kentrox.

Connecting T3/E3 Network Modules to the Network

To connect a T3/E3 network module to the network, use a 75-ohm 728-A coaxial cable to connect the BNC connector on the network module to a networking device. (See [Figure 20-2](#).)



Warning

This equipment contains a ring signal generator (ringer), which is a source of hazardous voltage. Do not touch the RJ-11 (phone) port wires (conductors), the conductors of a cable connected to the RJ-11 port, or the associated circuit-board when the ringer is active. The ringer is activated by an incoming call. Statement 1042



Warning

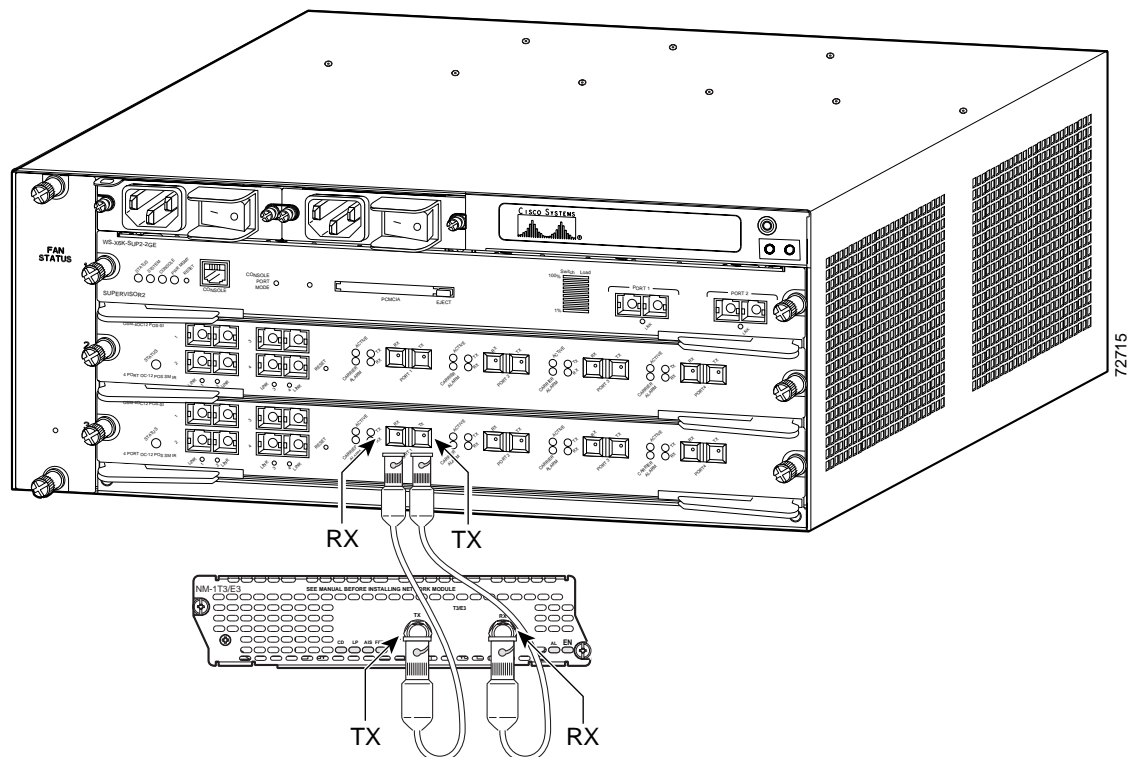
If the symbol of suitability with an overlaid cross appears above a port, you must not connect the port to a public network that follows the European Union standards. Connecting the port to this type of public network can cause severe injury or damage your router. Statement 1031



Caution

To minimize transient surges, the internal wiring should not be routed in the same conduit with power lines or external telephone lines.

Figure 20-2 Connecting a T3/E3 Network Module to a Networking Device (Cisco 7603 Router Shown)





Tip

When connecting the T3/E3 network module to a port adapter used in another router series, verify that you are connecting the TX port on the network module with the RX port on the port adapter, and the TX port on the port adapter to the RX port on the network module.

T3/E3 Network Module LEDs

All network modules have an enable (EN) LED. This LED indicates that the module has passed its self-tests and is available to the router. See [Figure 20-3](#) and [Table 20-1](#) for LEDs on the T3/E3 network module.

Figure 20-3 T3/E3 LEDs

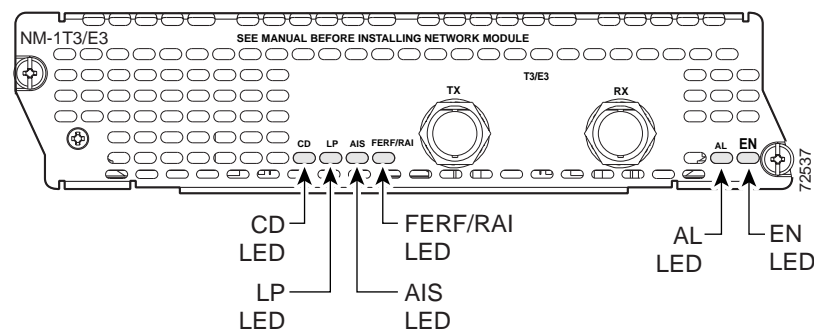


Table 20-1 T3/E3 Network Module LEDs

LED	Meaning
CD	Green indicates that a signal is present on the port.
LP	Yellow indicates that a loopback condition is present on the port.
AIS	Yellow indicates an alarm on the DS3 transmission.
FERF/RAI	Yellow indicates a remote failure at the far end of the connection.
AL	Yellow indicates that the port is out of frame.
EN	Green indicates that the network module has passed self-test and is available to the router.

Related Documents

For additional information, see the following documents.



Tip

For information on obtaining documentation, see the [“Obtaining Documentation”](#) section on page viii. For information on obtaining technical assistance, see the [“Obtaining Technical Assistance”](#) section on page xi.

Cisco IOS Software Documentation

For information on Cisco IOS software features specific to the T3/E3 network module, see the [Clear Channel T3/E3 Network Module with Integrated CSU/DSU](#) document.